NTS Detailed Curriculum for Physical Education, Health and Sport Sciences

NTS DETAILED CURRICULUM FOR PHYSICAL EDUCATION, HEALTH AND SPORT SCIENCES		
approved in NTS Academic Committee Meeting held on Monday, January 23, 2012		
attended by Prof. Dr. Syed Arif Kamal as Convener, Subject Committee for Mathematics and Member, Subject Committee for Physical Education, Health and Sports Sciences *Homepage*: **https://www.ngds-ku.org/kamal** • *e-mail*: **profdrakamal@gmail.com**		
Sr. No.	**Core Areas**	**Percentage**
01	Foundations of Physical Education 02	10%
02	Basics of Human Anatomy and Physiology 02	10%
03	Sport Medicine 03	15%
04	Rules and Techniques of Games and Sport 04	15%
05	Sport Management 04	05%
06	Exercise Physiology 04	10%
07	Research Methods in Physical Education	10%
08	Sport Psychology	5%
09	Nutrition for Sport	05%
10	Sport Biomechanics	05%
11	Sport Sociology	05%
12	Test, Measurement and Evaluation	05%
	Total	**100%**

DETAILED BREAKDOWN		
	Core Areas	**Percentage**
01	**FOUNDATIONS OF PHYSICAL EDUCATION** ➢ Definition, historical background of physical education ➢ Role, scope, aim, goals and objectives of physical education ➢ Scientific foundations and relationship of physical education with health ➢ Biological, psychological and sociological interpretations of physical education ➢ Physical, mental, emotional, neuromuscular coördination and social development	10%
02	**BASICS OF HUMAN ANATOMY AND PHYSIOLOGY** **a) Human Anatomy** ➢ Definition and terminologies. ➢ Branches of anatomy and physiology ➢ Cells and tissues ➢ Osteology ➢ Arthology ➢ Myology ➢ Tendons, ligaments, cartilages **b) Human Physiology** ➢ Functions and characteristics of cell ➢ Cardiovascular system (CVS) ➢ Blood ➢ Central nervous system (CNS) ➢ Respiratory system ➢ Excretory system	10%

DETAILED BREAKDOWN		
	Core Areas	**Percentage**
03	**SPORT MEDICINE** **Sport Injuries** ➢ Classification of injuries ➢ Mechanism of healing ➢ Sprains and strains ➢ Overuse injuries ➢ Knee injuries ➢ Tennis elbow ➢ Foot injuries **First Aid** ➢ Principles of first aid ➢ Identification of injuries ➢ Prevention, Rest, Icing, Compression, Elevation and Refer-to-Doctor (P. R. I. C. E. R.) ➢ Taping and dressing ➢ CPR, fracture and uncontrolled bleeding **Rehabilitation** ➢ Principles of rehabilitation ➢ Bone fractures, wounds and burns ➢ Head injuries ➢ Prevention of sports injuries/Aims of treatment ➢ Sport physiotherapeutic treatment and rehabilitation ➢ Fitness testing after treatment and rehabilitation **Application of Medicine in Sports** ➢ Components of fitness ➢ Doping • History • Methods • Banned group of drugs by IOC **Health Education** ➢ Communicable and non-communicable diseases • Viral • Bacterial • Parasitic ➢ Enemies of health • Obesity • Use of tobacco (smoking, *niswar*, *gutkha*) • Alcoholism	15%

DETAILED BREAKDOWN		
	Core Areas	**Percentage**
04	**RULES & TECHNIQUES OF GAMES AND SPORT** **Rules of Games** ➢ History of games ➢ Rules of indoor and outdoor games ➢ Gymnastics ➢ Organization and conduct of tournaments **Science of Track and Field** ➢ History of Olympics ➢ Events of track and field (measurements, techniques, rules of conduct) ➢ Conditioning and training principles	15%
05	**SPORT MANAGEMENT** **Management** ➢ Management process ➢ Physical education instructional programs ➢ Management and training programs ➢ Human-resource management **Sport Administration** ➢ Qualities and Responsibilities of administrator ➢ Planning ➢ Budgeting ➢ Financial management	05%
06	**EXERCISE PHYSIOLOGY** **Physiology of Exercise** ➢ Contractile mechanism of skeletal muscle ➢ Energetics of muscle contraction ➢ Cardiovascular system (CVS) and exercise ➢ Age and exercise ➢ Central nervous system (CNS) and exercise ➢ Philosophy and physiology of Warm-up ➢ Adaptations to exercise	10%

DETAILED BREAKDOWN		
	Core Areas	**Percentage**
07	**RESEARCH METHODS IN PHYSICAL EDUCATION** **Quantitative-Research Methods** ➢ Definition, importance and scope of research in physical education ➢ Literature search ➢ Surveys and questionnaires, tests and interviews ➢ Distribution, control tendency and percentiles (correlation, reliability, validity, content validity, T-test, ANOVA) **Qualitative-Research Methods** ➢ Types of research ➢ Research methods and designs ➢ Presentation of research proposal	10%
08	**SPORT PSYCHOLOGY** ➢ Definition and importance of psychology in sport ➢ Motivation ➢ Goal achievement ➢ Stress and its management ➢ Arousal, attention and personality of athlete	5%
09	**NUTRITION FOR SPORT** ➢ Nutrition and nutrients ➢ Metabolic-energy system ➢ Nutrition, fluid and training	05%
10	**SPORT BIOMECHANICS** ➢ Definition and importance ➢ Basic terms ➢ Forms of motion ➢ Laws of motion ➢ Kinematics ➢ Kinetics ➢ Biomechanics of various events (track and field, basketball, swimming)	05%

DETAILED BREAKDOWN		
	Core Areas	**Percentage**
11	**SPORT SOCIOLOGY** ➢ Definition and importance ➢ Social theories ➢ Violence ➢ Social class and sports participation ➢ Role of media in the development of social behavior	05%
12	**TEST, MEASUREMENT AND EVALUATION** **Approach to Measurement and Evaluation** ➢ Historical overview ➢ Importance of measurement and evaluation ➢ Principles of measurement and evaluation **Measurement of Physical and Motor Fitness** ➢ Agility tests ➢ Flexibility tests ➢ Strength tests ➢ Power tests ➢ Endurance tests ➢ Attitude scale ➢ Performance-evaluation scale **Technology in Physical Education and Sports** ➢ Teaching with computer assistance ➢ Visual technology ➢ Utility of software and information technology	05%
	Grand Total	**100%**

Web address of this document (*Prof. Kamal's homepage*)**:**
https://www.ngds-ku.org/NTS/NTS_HPED_Curriculum.pdf